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TO 1 2003 Claims 1-9 are pending in the subject applications. Favorable reconsidera in light of the remarks which follow is respectfully requested.

## 35 U.S.C. §103 Rejections

Claims 1-8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over JP 07026212 A either individually, or in view of JP 11021519 A. In addition to the reasons set forth in section 2 of Paper No. 5, the Office further states:

> With respect to the newly amended claim 1 now recites that layer B contains "an ethylene/propylene copolymer", and the newly added claim 9 recites "the layer B further contains an ethylene/butene-1 copolymer", the Examiner notes that JP '212 teaches that the second layer, which corresponding to the layer B of the instant claimed invention, is a layer comprising polyolefinic resin alone (Abstract). As such, JP '212 inherently encompasses polyolefinic copolymers, such as ethylene/propylene and ethylene/butene-1 copolymers. Alternatively, it is noted that JP '212 expressly teaches that for the top titanium oxide containing layer suitable polyolefin materials include various polyolefin copolymers, such as ethylene-alpha olefin copolymer, etc. (translated JP '212, [0010]). Also, JP '212 appears to teach that the polyolefin materials for the top layer can also be used for the second polyolefin layer (translated JP '212 [0015]). Further, it is believed that using the same polyolefin material in both polyolefin layers is either inherently disclosed, or an obvious selection to one of ordinary skill in the art, motivated by the desire to obtain good adhesion at the interface.

Applicants respectfully traverse this rejection.

In claim 1, Applicants claim a pressure-sensitive adhesive sheet for surface protection comprising a three-layered film in which a layer A, a layer B and a layer C have been laminated in this order and a pressure-sensitive adhesive layer on layer C. Layer A contains a polyethylene polymer in an amount of at least 60 % by weight based on the total weight of layer A. Layer B contains an ethylene/propylene copolymer in an amount of at least 50 % by weight based on the total weight of the layer B. Layer C contains a hydrogenated styrene/diene hydrocarbon random

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copolymer in an amount of at least 10 % by weight based on the total weight of the layer C.

Applicants have found that prior pressure sensitive adhesive sheets use

\* \* \* as a substrate a polypropylene type film in view of its strength,
flexibility, thermal resistance, etc. However, polypropylene type films
undergo chalking when subjected to long outdoor exposure to cause
dusting at peeling to litter the surfaces of car bodies with white powder
particles, disadvantageously. In addition, polypropylene type films
develop strong scorching odor due to corona discharge treatment applied
to them for securing adhesion with a release agent, etc. which remains
considerably after pressure-sensitive adhesive sheets are completed.
This gives rise to problems of injuring health of operators that they are

suffered from headache and the like induced by such odor if they carry out application for an extended period. (Page 1, line 24 – page 2, line 3)

Thus, the present invention focuses on and solves a specific problem with polyolefin. In particular, the present invention focuses on providing a pressure sensitive adhesive sheet for surface protection which has excellent weathering resistance and which undergoes neither chalking nor fracture in the substrate on peeling, even after prolonged outdoor exposure, and which develops less corona odor.

According to JP '212, "When the ultraviolet-absorption matter is not added to the polyolefin resin which is a base material, polyolefin resin causes a degradation reaction (bridge formation and decomposition) by the ultraviolet rays included in sunlight. A part of light penetrates a base material, and it reaches a binder layer." (paragraph 0003). Thus, the JP '212 reference focuses on obtaining a transparent surface-protection film which has improved weatherability (paragraph 0001).

Applicants respectfully submit that the present invention focuses on and solves specific problems with polyolefin, while the JP '212 reference focuses on a very different problem. Thus, since the JP '212 reference focuses on and solves a very different problem than that of the present invention, the standard used in selecting materials forming the sheets is also very different.

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First, according to the JP '212 reference, the selection of materials in the polyolefin system resin layer (a), (which corresponds to layer A of the present invention) includes a polyethylene (low density, inside density, high density, straight chain low density) and ethylene-alpha olefin copolymer, and ethylene-ethyl acrylate copolymer, an ethylene vinylacetate copolymer, an ethylene-methyl methacrylate copolymer, an ethylene-n butyl acrylate copolymer, polypropylene (a homopolymer, a random copolymer, block copolymer)(see paragraph 0010). Thus, according to JP '212, numerous polyolefins can be used, as long as titanium oxide has been incorporated into it.

On the other hand, a polyolefin of layer (A) of the present invention must be a polyethylene in order to solve the problems set out above.

There is absolutely **no** motivation in the JP '212 reference regarding the selection of a polyethylene from the wide range of polyolefins named.

Second, regarding the selection of a material in the polyolefin resin independent layer (b) (which corresponds to layer B of the present invention), the <u>same</u> polyolefin as that used in layer (a) is selected. Indeed, in the Examples, the same polyolefin used in layers (a) is always used in layer (b) as well.

On the other hand, a polyolefin of layer (B) of the present invention is an ethylene/propylene copolymer, which is <u>different</u> from that of layer (A). This is required in order to resolve the problems discussed above. By using an ethylene/propylene copolymer as a polyolefin of layer (B), the produced sheet has excellent heat-resistance, strength, modulus, and application workability.

Incidentally, if polyolefins listed in JP '212 are used as layer (B) in the present invention, various problems will occur. For example, if a polyethylene is used, the sheet will show poor heat-resistance so that it is difficult to dry at the time of solution coating, the sheet will have a poor strength such that tears will occur when it is used, and it will have a low modulus (too soft) such that it is inferior in application

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properties. The same problems with modulus and strength will occur for ethylene/ethylacrylate, ethylene/vinyl acetate, ethylene/methacrylate, ethylene/butylacrylate. Further, there is **no** motivation in the JP '212 reference regarding the selection of an ethylene/propylene copolymer in layer B.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaec*k, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 2142.

As set forth above, the JP '212 reference does not teach or suggest all the claim limitations. Specifically, the JP '212 reference does not explicitly teach a pressure-sensitive adhesive sheet wherein layer A contains a polyethylene polymer in an amount of at least 60 % by weight based on the total weight of layer A and layer B contains an ethylene/propylene copolymer in an amount of at least 50 % by weight based on the total weight of the layer B. Further, the Office does not state that JP '212 explicitly teaches of suggests these limitations. Rather, the Office relies on an inherency argument and asserts that:

JP '212 teaches that the second layer, which corresponding to the layer B of the instant claimed invention, is a layer comprising polyolefinic resin alone (Abstract). As such, JP '212 inherently encompasses polyolefinic copolymers, such as ethylene/propylene and ethylene/butene-1 copolymers.

Applicants respectfully submit that it is well-established that "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a

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given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999); MPEP 2112.

In this case, JP '212 merely indicates that layer (b) is a polyolefinic resin. Nothing in the JP '212 reference teaches or suggests that layer (b) contains an ethylene/propylene copolymer in an amount of at least 50 % by weight based on the total weight of the layer B, much less that it necessarily contains an ethylene/propylene copolymer in an amount of at least 50 % by weight based on the total weight of the layer B.

Further, regarding the Office's assertion that:

Alternatively, it is noted that JP '212 expressly teaches that for the top titanium oxide containing layer suitable polyolefin materials include various polyolefin copolymers, such as ethylene-alpha olefin copolymer, etc. (translated JP '212, [0010]). Also, JP '212 appears to teach that the polyolefin materials for the top layer can also be used for the second polyolefin layer (translated JP '212 [0015]). Further, it is believed that using the same polyolefin material in both polyolefin layers is either inherently disclosed, or an obvious selection to one of ordinary skill in the art, motivated by the desire to obtain good adhesion at the interface.

Applicants respectfully submit that the polyolefin of layer (B) of the present invention is an ethylene/propylene copolymer, which is <u>different</u> from that of layer (A). Thus, the same polyolefin material is <u>not</u> used for layers (A) and (B) in accordance with the present invention.

As clearly set out above, JP '212 does <u>not</u> teach or suggest all the claim limitations. In particular, JP '212 fails to teach or suggest a pressure-sensitive adhesive sheet wherein layer A contains a polyethylene polymer in an amount of at least 60 % by weight based on the total weight of layer A and layer B contains an ethylene/propylene copolymer in an amount of at least 50 % by weight based on the total weight of the layer B, as required by Applicants' claim 1. Further, there is no

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suggestion or motivation to modify the references to teach all of Applicants' claim limitations absent hindsight reasoning using Applicants' own disclosure.

JP 11021519 A does not remedy these deficiencies.

Accordingly, claim 1 is patentable over the JP 07026212 A and JP 11021519 A references. Claims 2-9 depend from claim 1 and, likewise, are patentable over the JP 07026212 A and JP 11021519 A references.

## CONCLUSION

Reconsideration and allowance of claims 1-9 is respectfully requested in view of the foregoing discussion. This case is believed to be in condition for immediate allowance. Applicants respectfully requests early consideration and allowance of the subject application.

Applicants believe that no extension of time is required since this response is being filed before the expiration of the specified time period. Applicants, however, conditionally petition for an extension of time to provide for the possibility that such a petition has been inadvertently overlooked and is required. As provided below charge Deposit Account No. **04-1105** for any required fee.

Should the Examiner wish to discuss any of the amendments and/or remarks made herein, the undersigned attorney would appreciate the opportunity to do so.

Respectfully submitted,

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